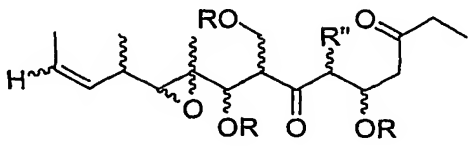
CLAIMS

1. A compound of the general formula I or a pharmaceutically acceptable salt, derivative, prodrug or stereoisomer thereof



(I)

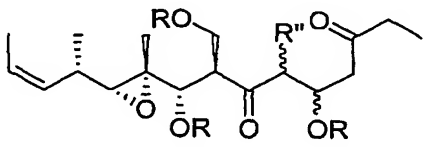
wherein the substituent groups defined by R are each independently selected from the group consisting of H, SiR'_3, SOR', SO_2R', C(=O)R', C(=O)OR', C(=O)NR', substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, aryl, heteroaryl or aralkyl;

the group R' is selected from substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, aminoalkyl, aryl, aralkyl and heterocyclic groups; and

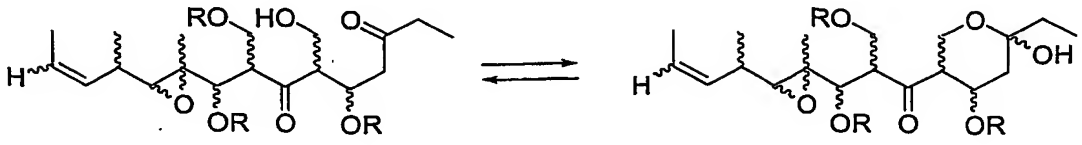
the group R'' is selected from the group consisting of H, OH, OR', OCOR', SH, SR', SOR', SO_2R', NO_2, NH_2, NHR', $N(R')_2$, NHCOR', $N(COR')_2$, $NHSO_2R'$, CN, halogen, C(=O)H, C(=O)R', CO_2H, CO_2R', CH_2OR, substituted or unsubstituted alkyl, substituted or unsubstituted haloalkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkylidene, substituted or unsubstituted alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl and substituted or unsubstituted heteroaromatic;

with the proviso that the compound is not compound 1, 3 or 4 of US 5,514,708.

2. A compound according to claim 1, with the following stereochemistry



3. A compound according to claim 1, wherein R'' is CH_2OH



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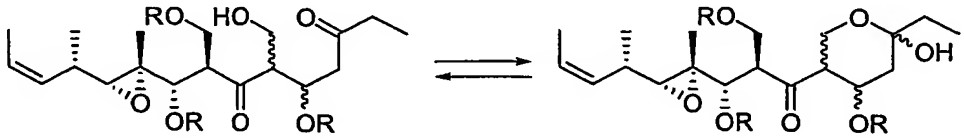
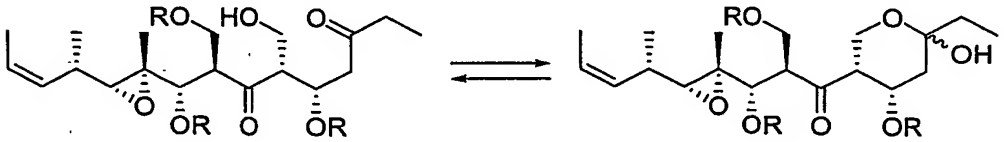
which may exist as a mixture of the ketone isomer and the hemiketal isomer, or as one of the two isomeric forms.

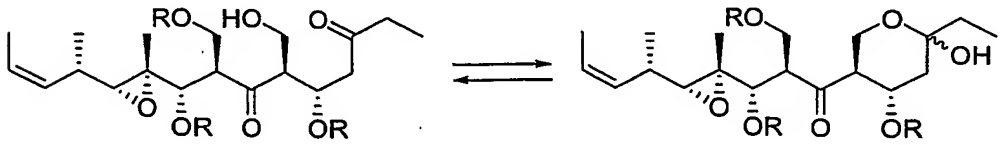
4. A compound according to claim 3, with the following stereochemistry



5. A compound according to claim 4, with the following stereochemistry



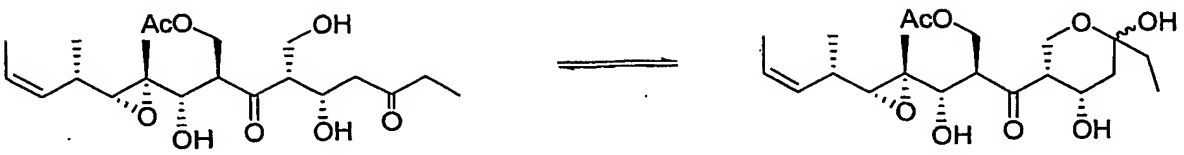
6. A compound according to claim 4, with the following stereochemistry



7. A compound according to claim 1 or 2, wherein R" is a substituted or unsubstituted alkylidene.

8. A compound according to any of claims 3 to 6, wherein at least one of the R substituents is C(=O)R'.

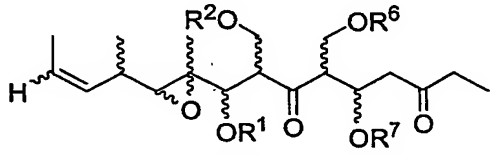
9. A compound according to claim 8, which is of formula 47



10. A compound according to claim 1, wherein at least one of the R substituents is not hydrogen.

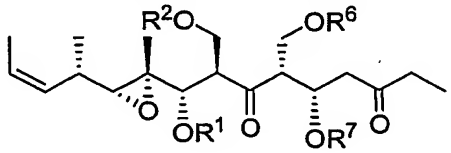
11. A compound according to claim 10, wherein each group R that is not hydrogen is a protecting group, which may be the same or different.

12. A compound according to claim 11, which is of formula



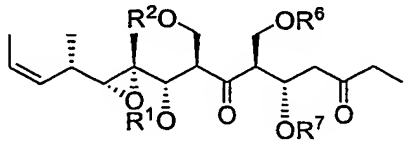
where R^1, R^2, R^6 and R^7 are hydroxy protecting groups.

13. A compound according to claim 12, which is of the formula **19**:



where R^1, R^2, R^6 and R^7 are hydroxy protecting groups

14. A compound according to claim 12, which is of the formula **30**:



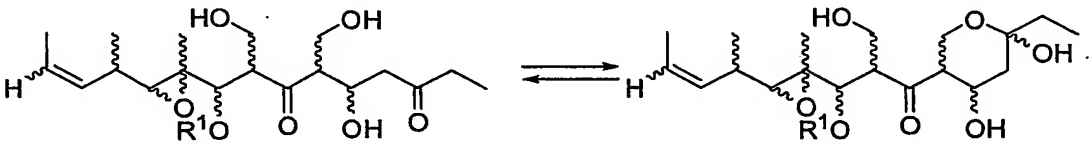
where R^1, R^2, R^6 and R^7 are hydroxy protecting groups.

15. A compound according to any of claims 12-14, wherein R^1, R^2, R^6 and R^7 are the same protecting group.

16. A compound according to any of claims 12-15, wherein R^1, R^2, R^6 and R^7 are chosen from TBS ($tBuMe_2Si$-), TBDPS ($tBuPh_2Si$-), TES (Et_3Si-), MOM (CH_3OCH_2-), MEM ($CH_3OCH_2CH_2OCH_2$-), SEM ($(CH_3)_3SiCH_2CH_2OCH_2$-) and Ac- (CH_3CO-).

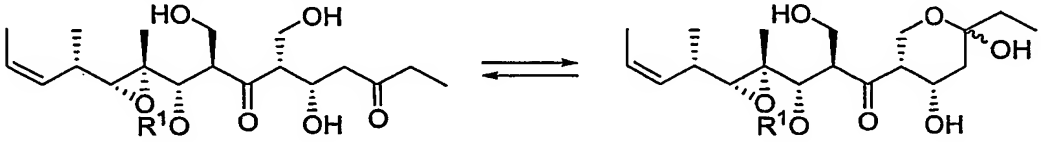
17. A compound according to claim 16, wherein R^1, R^2, R^6 and R^7 are chosen from TBS ($tBuMe_2Si$-) and TBDPS ($tBuPh_2Si$-).

18. A compound according to claim 11, which is of formula

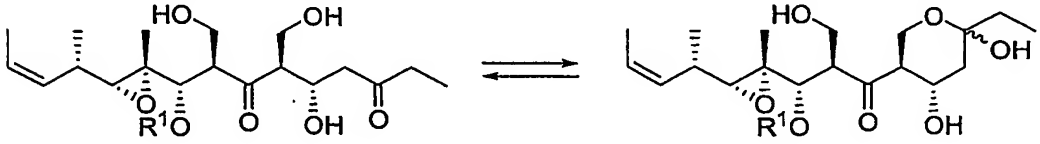


where R^1 is a hydroxy protecting group.

19. A compound according to claim 18, which is of the formula **20**:



20. A compound according to claim 11, which is formula **31**:



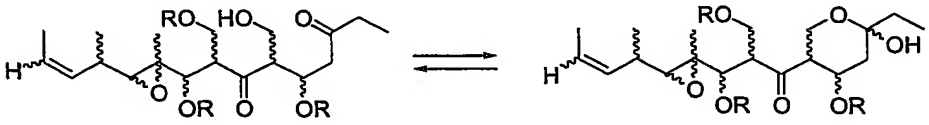
21. A compound according to any of claims 11 to 20, wherein R^1 is TBS ($tBuMe_2Si$-).

22. A pharmaceutical composition comprising a compound of formula **I** or a pharmaceutically acceptable salt, derivative, prodrug or stereoisomer or an intermediate of their synthesis thereof, as defined in any of claims 1 to 21, and a pharmaceutically acceptable carrier.

23. The use of a compound of formula I or a pharmaceutically acceptable salt, derivative, prodrug or stereoisomer thereof, as defined in any of claims 1 to 21, in the preparation of a medicament for treating a tumour.

24. A method of treating a tumour which comprises administering an effective amount of a compound of formula I or a pharmaceutically acceptable salt, derivative, prodrug or stereoisomer thereof, as defined in any of claims 1 to 21.

25. A process for synthesis of a myriaporone compound of formula 5:



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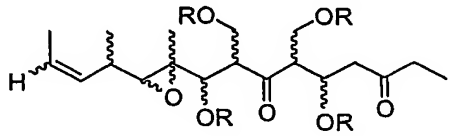
which may exist as a mixture of the ketone isomer and the hemiketal isomer, or as one of the two isomeric forms;

wherein the substituent groups defined by R are each independently selected from the group consisting of H, SiR'_3, SOR', SO_2R', C(=O)R', C(=O)OR', C(=O)NR', substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, aryl, heteroaryl or aralkyl, and wherein at least one group R is hydrogen;

and wherein the group R' is selected from substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, aminoalkyl, aryl, aralkyl and heterocyclic groups;

which comprises removing a protecting group from an intermediate compound of formula:

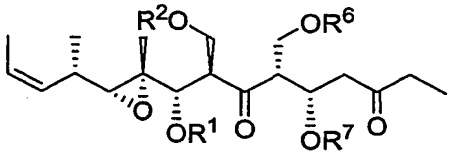


wherein the substituent groups defined by R are each independently selected from the group consisting of H, SiR'_3, SOR', SO_2R', C(=O)R', C(=O)OR', C(=O)NR', substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or

unsubstituted alkynyl, aryl, heteroaryl or aralkyl, and wherein the or each group R to become hydrogen in the compound **5** is in the intermediate compound protecting group; and wherein the group R' is as defined.

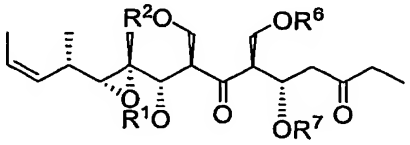
26. A process according to claim 25, wherein more than one group R in the intermediate compound is a protecting group.

27. A process according to claim 25, which comprises removing at least one protecting group from a compound of formula **19**:



where R^1, R^2, R^6 and R^7 are hydroxy protecting groups.

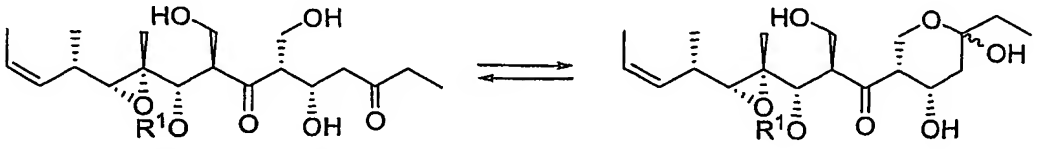
28. A process according to claim 25, which comprises removing at least one protecting group from a compound of formula **30**:



where R^1, R^2, R^6 and R^7 are hydroxy protecting groups.

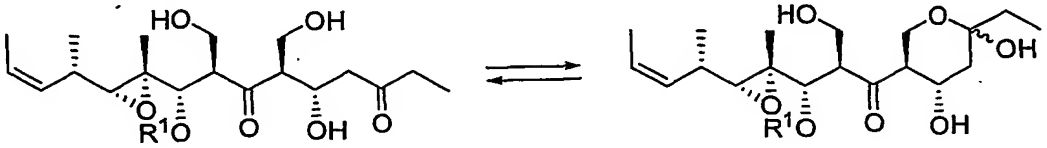
29. A process according to any of claims 25 to 28, wherein R^1, R^2, R^6 and R^7 are the same protecting group and are removed.

30. A process according to claim 25, which comprises removing a protecting group from a compound of formula **20**:



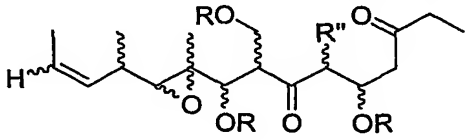
where R^1 is a hydroxy protecting group.

31. A process according to claim 25, which comprises removing a protecting group from a compound of formula **31**:



where R^1 is a hydroxy protecting group.

32. A process for synthesis of a myriaporone compound of formula **I**:



(I)

wherein the substituent groups R and R" are as defined in claim 1;
which comprises derivatisation of a compound of formula **5**:

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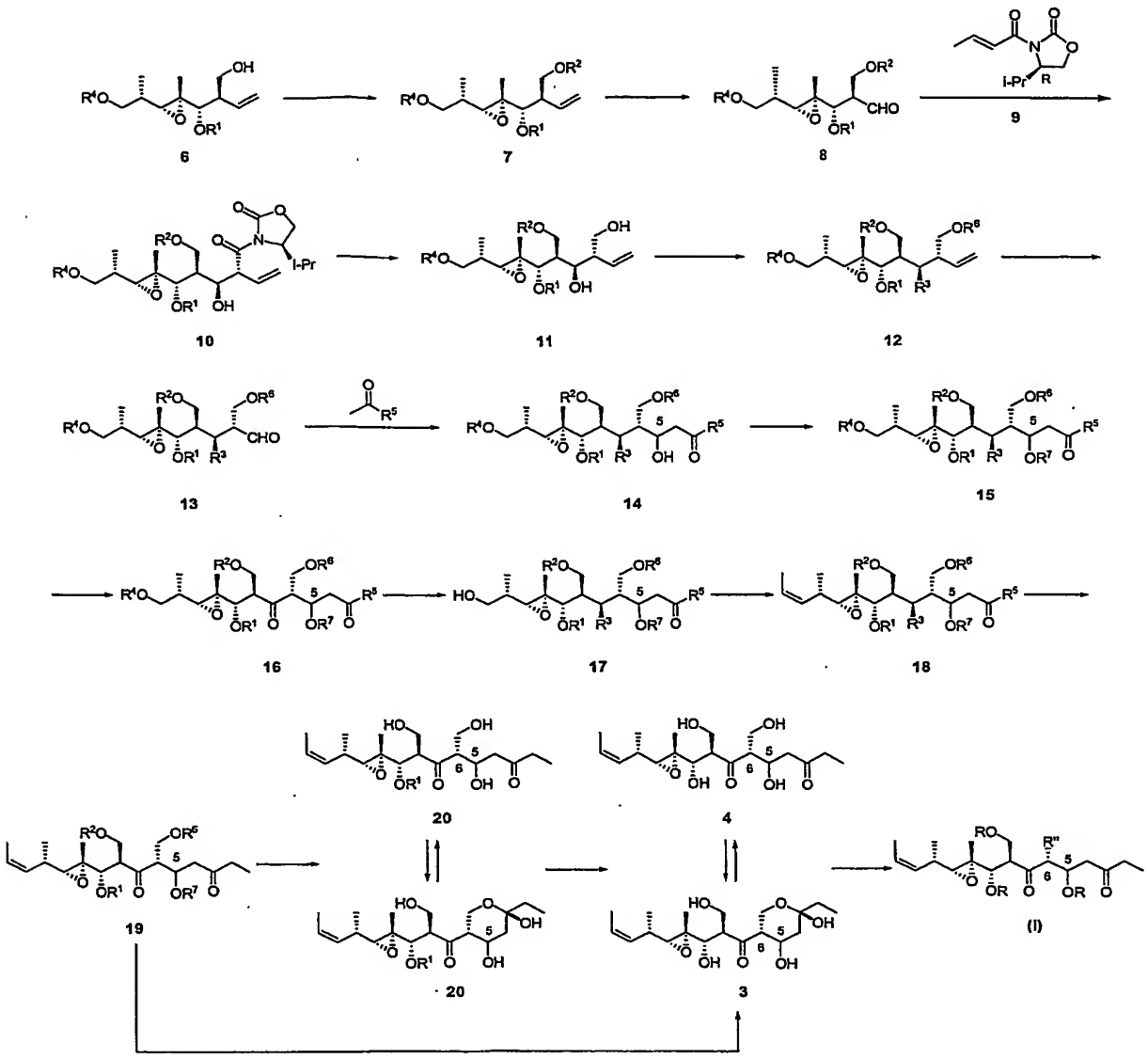
which may exist as a mixture of the ketone isomer and the hemiketal isomer, or as one of the two isomeric forms;
and wherein the substituent groups are as defined in claim 25

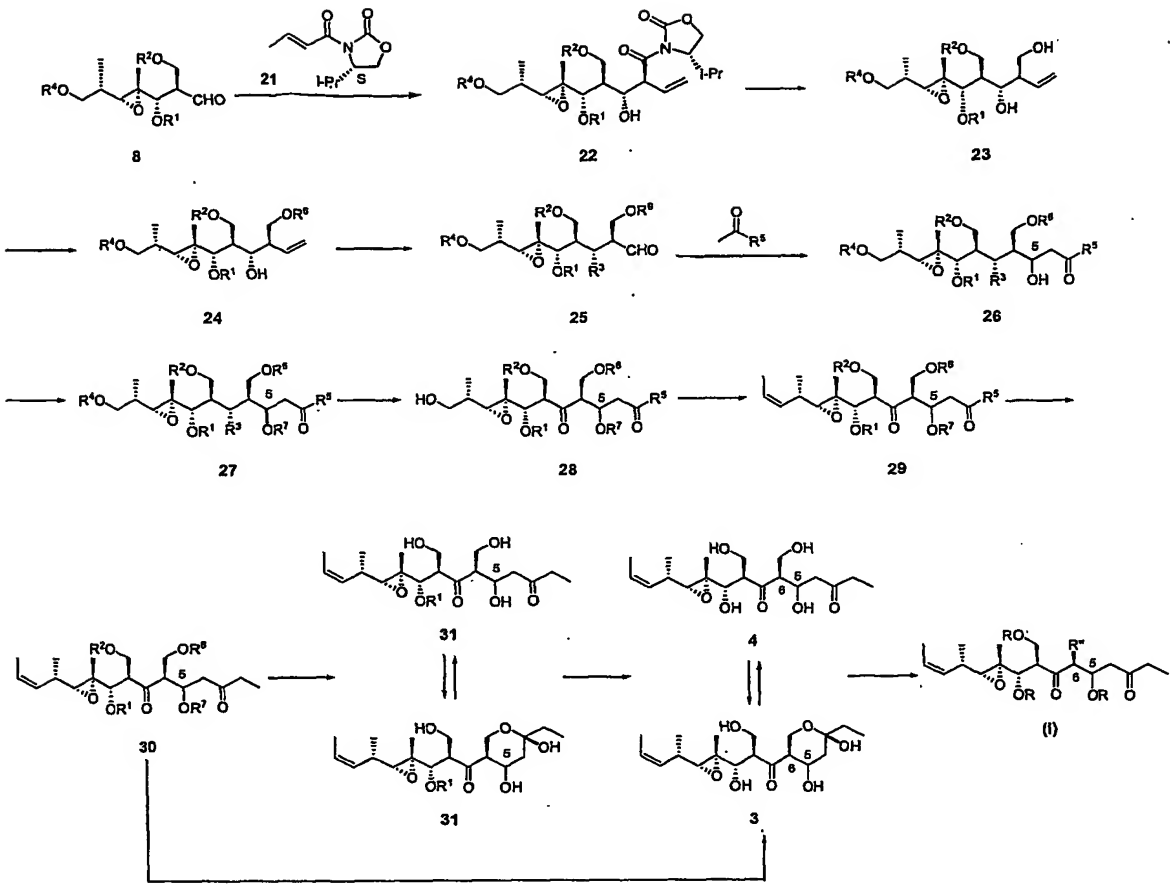
33. A process according to any of claims 25 to 32, when carried out by the steps of Scheme 1 starting from compound **6**



Scheme 1

where R^1, R^2, R^4, R^6 and R^7 are hydroxy protecting groups.

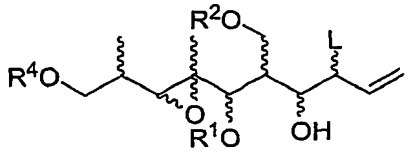
34. A process according to any of claims 25 to 32, when carried out by the steps of Scheme 2 starting from compound **6**



Scheme 2

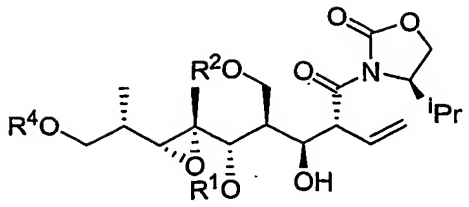
where R^1, R^2, R^4, R^6 and R^7 are hydroxy protecting groups.

35. A compound of formula

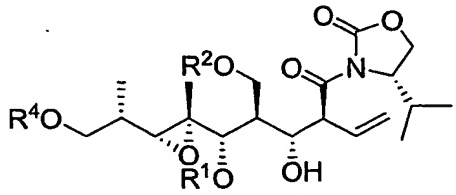


where R^1, R^2 and R^4 are hydroxy protecting groups, and L is a stereospecific leaving group which induces chirality.

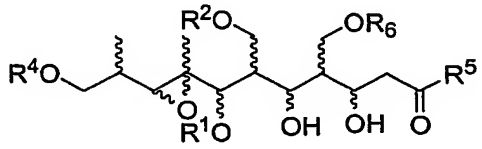
36. A compound according to claim 35, which is of the formula **10**:



37. A compound according to claim 35, which is of the formula **22**:

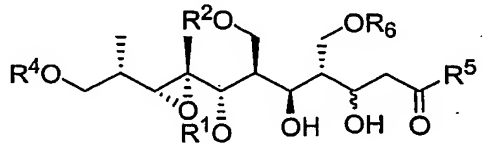


38. A compound of formula

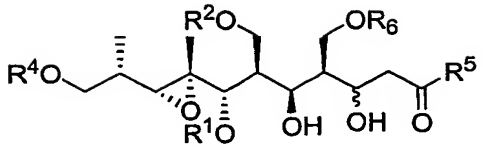


wherein R^1, R^2, $R^4$and R^6 are hydroxy protecting groups;
R^5 is selected from the group consisting of H, SOR′, SO_2R', C(=O)R′, C(=O)OR′, C(=O)NR′, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, aryl, heteroaryl or aralkyl;
and R' has the same meaning as defined in claim 1.

39. A compound according to claim 38, which is of the formula **14**:



40. A compound according to claim 38, which is of the formula **26**:



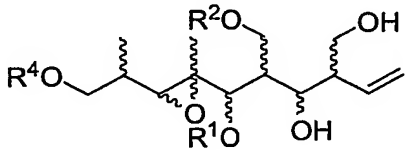
41. A process for preparation of a compound of formula **14** which comprises chain extension of a compound of formula **13**.

42. A process for preparation of a compound of formula **26** which comprises chain extension of a compound of formula **25**.

43. A process for preparation of a compound of formula **19** which comprises chain extension of a compound of formula **18**.

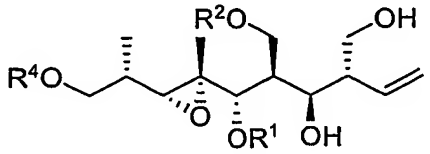
44. A process for preparation of a compound of formula **30** which comprises chain extension of a compound of formula **29**.

45. A compound of formula

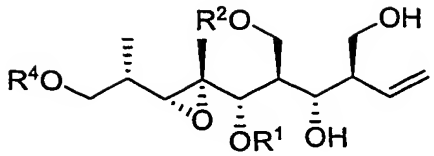


wherein R^1, R^2 and R^4 are hydroxy protecting groups.

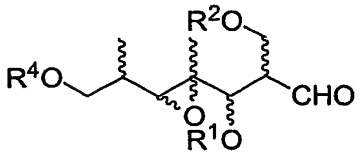
46. A compound according to claim 45, which is of the formula **11**:



47. A compound according to claim 45, which is of the formula **23**:



48. A compound of formula



wherein R^1, R^2 and R^4 are hydroxy protecting groups.

49. A compound according to claim 48, which is of the formula **8**: